A TREATISE UPON

Touch and Technic

AND

The New Scientific Method

for Quicker Attainment

OF

THE POWERS OF

Artistic Expression

IN PIANO PLAYING.

THE NEW SCIENTIFIC METHOD

FOR DEVELOPING

THE TECHNIC OF THE PIANO,

AND THE NECESSARY CONTROL OF

ARTISTIC TOUCH.

ITS IMPORTANT PHYSIOLOGICAL BASIS EXPLAINED. THE FALLACIES OF USING ONLY KEYBOARD TECHNICAL METHODS CONSIDERED; THER DEFICIENCIES EXPOSED AND THE NECESSITY OF SUPPLYING ACCESSORY MEANS FOR REMEDYING SAME, DEMONSTRATED BY PRACTICAL RESULTS.

WHEN we consider the increased technical difficulties with which modern pianoforte composers have continued to strain the executive abilities of piano players, it must be admitted that piano technical methods have by no means advanced in the same ratio, and consequently the piano teacher and student of the day continue to struggle on, under cumbersome technical exercises, that are inadequate to produce the necessary physical results in the hand's mechanism, and that cause a great nervous strain, resulting too frequently in a deadening process upon the artistic faculties, and sometimes in a complete breakdown.

It is, indeed, a sad commentary upon the inadequate and uneconomical results obtainable by the pianoforte technical methods of the day, that the number of really artistic players evolved therefrom, is infinitessimally small, as compared with the hundreds of thousands of ambitious piano students. And when a more than ordinary player is met with, then his (or her)

extra capacities are usually attributable to an innate, native talent, and not to the excellence of any technical method. Now why is it **that the greatest artistic executive possibilities in piano playing are within the reach of such a few?** I have no hesitation in saying, that it is not solely because "Dame Nature" has been so beneficent to the great minority; but that **the great majority have been prevented from attaining their maximum technical capacities, by the methods under which they have been trained;** methods that have been too blindly accepted, but which are now commencing to falter under the scrutiny of modern scientific investigation, which shows their lack of true philosophical basis, exposes their harmful results, explains the causes of same, and supplies remedial measures to counteract their deficiencies.

And here I would wish it understood, that it is not intended by my method to do away entirely with technical exercises at the piano, but to greatly reduce the time given to them, and to be a most valuable (yes, indispensable) auxiliary to same, **for enlarging the scope of the technical dexterity of the hand,** my scientific investigations into the physiological side of piano-playing having proved a field which had not been exhaustively explored.

It is true that genius cannot be evolved by any human ingenuity; but nature's genius itself (as regards piano playing) is useless without the possession of technical excellence, and technical excellence is largely the result of artificial training, as the immense amount of time spent on same by the greatest pianists, fully proves. Where genius therefore exists, it should certainly be furnished with the powers of expression, **in the most economical manner.**

We have frequently had enlargements and sometimes modifications of old technical methods; but a **thorough reform, by a thoroughly new departure from old and time-worn methods,** marks "an epoch in pianistic art," which the present period in its history imperatively demands in the interest of greater and more universal advancement, and which the genius of our age should be equal to.

From time to time, during the past few years, I have sent

out amongst the musical profession of the United States the testimony of our leading pianists, and from the Music Directors of Colleges, Schools, Conservatories of Music, etc., in regard to **the actual results** they have obtained by means of my scientific system of training the hand **in accordance with true anatomical principles.**

Of this new departure from old technical methods an eminent American pianist says: **"It is the most important "step in advance, regarding artistic mechanical study "of piano playing of the present age."**

It is indeed time that we outlived the slow, nerve-wearing methods of preceding generations, and it is to science that we must look for those quicker processes with which to supersede them. And though skeptical prejudices may retard the introduction of new methods, yet such prejudices form but temporary barriers in this enlightened age, which moves to its goals more quickly than did its predecessors.

Now, I maintain (and my assertion is corroborated by the testimony given herewith from many eminent pianists and teachers) that the endeavor to get from the human hand **its maximum powers as a medium of mental expression by means of the key-board alone** (however carefully prepared the technical exercises may be, or by what eminent musician they are produced or edited), such endeavor is futile; for such method is not only too mechanical of itself, in its influences upon the mechanism of the hand, but it is absolutely unscientific, being subversive of those important physiological principles which **must** govern a course of treatment which has for its object the highest attainable possibilities in subjugating the hand to the influences of mental volition.

In addition to the strong testimony received from eminent teachers themselves in regard to the good effects on the sense of touch produced by using my method, what more forcible or practical evidence of the inability to produce such effects by piano methods only, could be given than the following from a piano teacher who writes: "Some of America's most eminent "pianists and teachers have been my instructors in technique, "but never have taught me what your invention has in a very

" short time. I never knew what it was to have a very sensitive " touch until I had used it. Those subtle features in regard to " touch, which perhaps are not teachable, are felt or experienced " after a short trial of your invention."

The technic of the piano, from a physiological standpoint (and also from an artistic standpoint) is represented by **the powers of conscious control of the muscles;** for, as a Professor of the Royal Academy of Music, London, England, says : "When we characterize a pianoforte player's technique as " 'perfect,' it really means that the muscles of the fingers, hands " and arms of the player appear to be entirely under the control " of his will-power."

Is it not reasonable, that scientific investigation into this subject can discover the physical channels through which such powers flow, and provide a method for their more direct and more economical treatment? It must surely commend itself to the thoughtful teacher, that science should be able to reduce to a more perfect and exhaustive system, the direct physical treatment of the piano-playing muscles, for the development of those merely physical results, for which technical exercises are given at the keyboard. And not only so, but I also maintain, that by scientific method we are enabled **to arouse dormant qualities,** in the hand's mechanism, and **awaken thereby new powers,** which are important factors in producing greater artistic expression ; besides the advantage of carrying to a greater degree of development (and in less time) those faculties which usual technical exercises reach. And in this connection I not only arraign mere key-board exercises, as being subversive of true physiological principles ; but I challenge any key-board method of technical exercises to show such quick and excellent results as the scientific method which I advocate, can show. And I am fully justified in so doing, being backed by a mass of practical evidence, which the past few years have brought me from many teachers, both of Europe and America.

However great the artistic executive abilities of a pianist have become under merely key-board training, the powers of sensitive control over the infinitude of tone-coloration can be increased by the scientific treatment of the hand's mechanism ; in fact, so

sensitively and effortlessly can the muscular action of the hand be made to respond to the process of thought, that the result may be taken as a true test, not merely of technical ability, but also of **mental capacity.**

Science has thus been made subservient to art, enabling us to enter upon a new era, characterized by higher possibilities in artistic execution, owing to an extended knowledge in regard to that beautiful, complex piece of anatomical mechanism, through whose intricate channel the pianist's musical thoughts must be transmitted, and which channel must be cleared of obstructions which too often rob the mental emanations of their greatest and most delicate beauties.

How often true, deep artistic feeling has existed in musical students, and yet has never been able to realize its highest aspirations, because their hands have not been given the capabilities of technically expressing the finer emotions of their artistic natures ; but on the contrary, the chilling and corrosive process of monotonous technical method upon their sensitive nervous systems, has resulted in very detrimental effects to their proper advancement. And is this to be wondered at when we consider that "the human nervous system is the most highly "organized creation known to scientists."

The continued success which the merits of my invention have insured it, and the ever increasing recognition of the sound physiological principals upon which it is based, on the part of piano teachers generally, warrants me in again calling the attention of piano players thereto, and as I have in my previous writings given full explanations of same, I will confine myself herewith more particularly, to three very important results that are obtainable by means of this new method, and which are now (owing to practical demonstration) recognized as most important factors in the preparation of the hand for the necessities of piano playing, and their importance is enhanced by the fact, that they are **additional results** to those obtainable by keyboard exercise only.

(1.) THE NECESSITY OF SUPPLYING MEANS FOR A MORE DIRECT TREATMENT OF THE EXTENSOR MUSCLES.

My investigations into the physiological side of piano playing, revealed that **a most important, requisite feature in the production of a really sensitive touch, is largely counteracted by keyboard exercises,** in that the naturally strong muscles (the flexors) are unduly developed thereby, leaving their counter-muscles (the extensors, or lifting muscles) in a relatively weak condition. Now, as these naturally weaker extensor muscles can exercise, when strengthened, such an important influence for the control of a delicately poised finger or hand, it is an absolute necessity to provide a means of giving specific exercise for the development of these important details in the sensitive working of the hand's mechanism, and which cannot be done at the keyboard, "unless (as a teacher remarks), you stand on your head."

In regard to the importance of such specific treatment of the extensor muscles as I advocate, I will quote the following as being the lately expressed views of a German pianist, in a Berlin musical journal, after two year's experience with my invention. He says:

"I maintain, that unless an approachingly equal relation of "strength between the flexor and extensor muscles be attained, "then **a sensitive control of the muscles becomes "directly impossible."**

Practical demonstration with my invention has often disarmed skeptical persons, by the remarkably quick results obtained when the dormant faculties of the extensor muscles are thus awakened. And in connection with the subject of skeptical predjudice, the gentleman above alluded to says: "It is quite "incomprehensible how some well-trained musicians, English "Doctors of Music, etc., sneer at Mr. Brotherhood's useful "invention, although even a Franz Liszt, and our worthy Dr. "Hugo Riemann, by their testimonies, have broken a lance in "its favor."

As showing, also, the interest awakened in the matter, since I drew the attention of eminent piano teachers to the necessity

of treating the hand on a more scientific basis and in accordance with the laws of physiology, Dr. Wm. Mason, in his new edition of "Touch and Technic," says in the introductory chapter, in referring to the necessary training of the flexor and extensor muscles: "Until up to within a comparatively recent date, the "thorough and systematic training of these muscles has been "in a great degree neglected, or at least **they have received "nothing like the attention they deserve; but the "importance of such training is now beginning to "be recognized."**

As I was the originator of this close attention to muscular details, it is gratifying to see such complimentary tribute to the result of my careful investigations. In the leading article of "Der Klavier-Lehrer," for August, 1889, (Berlin, Germany), appeared the following: "It is certain, that before the invention "of the Technicon, there existed no special remedy for counter-"acting the weakness of the lifting muscles, and to Mr. Brother-"hood belongs the honor of having solved the problem."

On this important feature of extensor muscle development, Mr. Wm. H. Sherwood says: "Mr. Brotherhood's invention is "invaluable in compensating for the helpless one-sidedness of "physiological development as taught at the key-board, and in "helping the student to awaken powers of intercepting the brute-"force of striking the keys."

Mr. W. S. B. Mathews and several leading teachers have asserted that "my invention marks an epoch in the art of piano-teaching," and such valuable testimony quoted above (as also from many other sources) goes to show that such assertion has been substantiated by practical demonstration, and that, henceforth, a system of technical teaching, which does not include the specific treatment of the extensor muscles, will be behind the age.

If the extensor muscles of the hands and fingers are not relatively developed with their antagonist or flexor muscles, then the technical mechanism is imperfect, because these muscles cannot have the necessary controlling influence over their naturally stronger counter-muscles, (or striking muscles), and, consequently, in the production of pianissimo passages, for instance,

the mind becomes occupied in conscious effort to restrain the fingers from striking too loud, owing to the over-balance of strength in the striking muscles; whereas the mind should be insulated solely in the emotions of the musical phrase under interpretation, and **which becomes possible if the hand's mechanism has been so developed in detail as to enable its respective parts to respond effortlessly to the process of thought.**

The development of mere force without the development of a controlling influence over such force, **is the tendency of technical exercises at the piano,** and is the cause of that hard, unsympathetic quality of tone which too often characterizes the piano-playing of the day. And here I will quote what an eminent London surgeon says upon this point:

"The uncontrolled action of the strong flexors, is produc-
"tive of a hard percussive tone, the finer gradations of tone-
"color involve the control of a carefully regulated action, in
"which every individual element is balanced by sets of muscles
"working together, and whose action under the regulation of
"one's intelligence produce in some way or other those qualities
"of tone which one can recognize when one hears them, but
"which defies analysis."

The "helpless one-sidedness of physiological development as taught at the key-board," referred to above by Mr. Sherwood, is caused by the incessant striking of the keys, which unduly magnifies mere force, without any provision for magnifying in a direct ratio the necessary strength in the counter-muscles, to insure control of otherwise over-developed parts, and without producing the necessary equalization and increased elasticity corresponding with, and necessary to increased force, and hence the colorless tone, devoid of that infinite shading, so essential to artistic piano-playing.

Since I drew attention to this absolute necessity of extensor muscle exercise, a reference to this necessity has been made in new editions of old methods of technical exercises for the piano; but such methods cannot supply the means for accomplishing the desired end. The absurdity will be readily seen, of methods which **advocate** the development of the extensor

muscles, and yet which, by the physical effects they produce, **are subversive of the very principle advocated.**

A perusal of the many testimonials which I give herewith, cannot fail to impress the thoughtful teacher with the necessity of extensor-muscle exercise.

(2.) THE ATTAINMENT OF A GREATER ELASTICITY IN THE PIANO-PLAYING MUSCLES.

The second point to which I desire to call attention, as an important outcome of my anatomical investigations is, **the facility with which a greater degree of relaxation or elasticity can be obtained in the piano-playing muscles, by means of my invention.**

Pianists are aware that the most satisfactory feeling in the hand for piano playing is a feeling of relaxation in the muscles of wrist, hand and fingers.

Now I found by a long series of anatomical experiments that to gain increased powers of relaxation in a muscle it is necessary to increase its powers of contraction; in fact, increased relaxation is gained in a direct ratio with increased contraction. In the equalization of working parts in the hand's mechanism this is a most important feature, and the development of **all** the muscles of the wrist, hand and fingers, tends not only to augment their contractive qualities, but also to **equalize** the powers of contraction and relaxation on both sides of the arm, hand and fingers, thereby giving the desired balance of powers in the muscles **and their relative counter-muscles.**

Key-board exercises on the contrary do not sufficiently reach many important details of the anatomy involved, consequently it follows that by awakening these dormant parts into action by accessory means we gain additional results. It is, therefore, necessary to eliminate all sluggishness or weakness in the contracting powers of **all** the piano-playing muscles before the maximum powers of elasticity can be attained.

Each individual muscle which forms a component part of the medium of communication between the brain and the key-board receives its specific treatment by means of my invention,

so as to render it capable of taking its part in the delicate working of the hand's mechanism and for transmitting "the vital spark of intelligence and emotion" to the key-board. The subtle effects of tone-color which we hear from the greatest pianists, are largely due to the possession of a **controlling influence over strength**; for strength under subjugation is pregnant with vivid life as compared with the insipid vagaries of an uncontrolled weakness which is unable to mould itself to the higher requirements of artistic expression.

(3.) THE ACQUISITION OF A CONSCIOUS MUSCLE CONTROL, GIVING THEREBY A MORE THOROUGH COMMAND OF ARTISTIC TOUCH.

We now come to a very important point, viz: conscious control of the muscles.

This is a feature which my invention is intended to produce, and which has also received its acknowledgment by the testimony of eminent pianists and also of medical men.

Piano teachers have too long been treating the hand from a mechanical instead of from a mental standpoint, (even by means of piano technical exercises), and the reason of this is, because they have not understood the anatomical relations existing between the brain and the nervous and muscular systems. Now, in my method of hand treatment, each muscle is called into action **separately and alone,** with a certain dynamic force or resistance against its contractive powers, which resistance can be increased as the muscle accumulates strength. Whilst an individual muscle is thus under treatment, the mind is enabled **to concentrate the full power of its volition upon the action of such individual muscle, and the result is an increasing conscious control over an increasing strength of muscular action,** until all sluggishness of response is eliminated, and weak muscles become strong, and in a condition to respond promptly and without effort to the mental call. Concentrated mental action passing from the brain through the motor nerve to an individual muscle, forms one of the specific channels of conduction, through which the pianist's

mental emanations have to pass to the keyboard; and the passing of mental volition through these independent, individual channels, increases their powers as deeply sensitive conductors of the mental energies, giving also a thorough control of "independence of parts."

It must be conceded by thinking pianists, that my investigations have been essentially in the right direction, seeing that they point to a more intelligent and discriminating **mental** attitude. Too much time has heretofore been spent in practicing technical exercises, without cultivating the necessary powers of mental concentration upon the anatomical details involved, with a view of ultimately subduing the mechanism of the hand into **automatic and effortless response to mental requirements.** Technical exercises at the piano cannot be productive of the highest attainable results, not only because too many muscles are brought into action at once, (or follow each others actions too quickly), to allow of mental concentration upon muscular details; but also (and of more importance) such key-board exercises do not search out, and bring fully into action, in a complete and thorough manner, some of the principal muscles, which under specific development prove to be most important agencies, controllable by the mental faculties, and necessary component parts for the production of a sensitive and artistic touch.

A teacher may use every endeavor to teach a pupil the subtleties of sympathetic touch ; he may even give on the piano practical illustrations for the pupil's imitation; but they cannot be taught or imitated if they cannot be mentally felt, and the outward, practical expression of such feeling by means of the human hand, pre-supposes the existence of certain physical conditions in the anatomical mechanism whose motion of parts produces such subtleties of touch. If such physical conditions are wanting, then it is impossible to teach the acquirement of a sympathetic touch without taking measures to bring about the necessary physical conditions for its production. Special requirements call for special treatment; the laws of nature must be studied. As I said in a former treatise: "The soul of a "musical genius is chained to a mortal frame, and material

"wants must therefore be supplied. A clog is put upon the "imagination; the poetic is burdened with the prosaic."

In regard to the mental basis of my invention, Mr. Albert R. Parsons, (President of the Music Teachers' National Association, 1889-90), says: "It is a **thinking machine,** so unerringly "does it guide the students thoughts into right channels." And Mr. Wm. H. Sherwood says; "It developes the influence of "mind over matter, and the conscious control of new sensibil-"ities and discriminations."

The testimony of hundreds of other teachers also corroborates the truth of this very important feature.

Considering the importance of the three items I have herein treated upon, and which form the foundational basis of my invention, it behooves piano teachers to make themselves acquainted with this new and economical method for saving them much of the drudgery of teaching, and insuring to their pupils "a quicker progress with less labor."

Mere mechanical aids, which are devoid of the necessary physiological basis, or in the use of which the mental faculties are not brought directly into action, cannot be too strongly deprecated. What is requisite is the application of a true scientific process in conjunction with mental concentration upon details. There is a vast difference between the merely mechanical and the scientific.

I claim that my method of treating the hand is founded upon correct, scientific and carefully prepared theories, which are substantiated by such strong, practical testimony **from actual results obtained** as to insure for it a permanent recognition as being indispensable in the artistic piano teaching of the future. And when we consider that the purpose of monotonous technical exercises at the piano is to bring about physical developments of the hand, wrist and arm, must it not be conceded that such results (which constitute the physiological side of piano playing) can be more directly and economically treated by the application of a method founded upon a correct anatomical basis? This question is forcibly answered by the hundreds of testimonials which I have received, and which I have published from time to time, and which go to prove that

my system of hand treatment is eminently practical, there being no useless element in its entire course of exercises; it forms, in fact a complete and exhaustive analysis of the anatomical piano playing mechanism.

Moreover, **the direct and practical application of the results gained thereby to the key-board itself** cannot fail to commend it to the earnest teacher, as being the outcome of a knowledge of the requirements of pianoforte technics.

I trust that what I have said herein will be found to contain more that is of **practical** value, in regard to this all-important subject in piano teaching, than the very **vague generalities** that have been too much indulged in.

I append herewith some of the letters received from eminent pianists, including also some of the latest received from many teachers, also from the Music Directors of Colleges, Conservatories of Music, Schools, etc. (in some of which a dozen Technicons are in use), and the perusal of many of these letters will be found not only interesting but also instructive to the piano teacher, as will also be the testimony from the medical profession, which is given.

A list is also given of some of the Educational Establishments where my invention is being used, and Principals, Music Directors, Superiors of Academies and Music Teachers generally, should make themselves acquainted with this new labor-saving device, which will be sent them on two week's trial, upon receipt of P. O. order for one-half the professional price, and the payment of express charges if returned, in which case the one-half deposited will be refunded. If the instrument is kept, then remaining half to be paid within thirty days from receipt of the Technicon.

Explicit directions how to use it are sent with each instrument.

For further particulars apply to the inventor,

J. Brotherhood,

No. 6 West 14th Street, New York.

N. B.—Correspondence with teachers solicited.

TESTIMONY OF THE MEDICAL PROFESSION

In regard to the importance and correctness of the Anatomical and Physiological Basis of the Technicon.

DOCTOR HENRY G. HANCHETT,

NEW YORK,

says in an article upon the Nervous Relations of Piano-forte Practice:

The nervous system presides over all the functions and actions possible to the human body. It is a marvelously complicated affair, the most highly organized creation known to scientists. Pianists ought to specialize to the last degree in their practicing, and THE VALUE OF THE BROTHERHOOD TECHNICON LIES IN ITS FACILITATING THAT PROCESS. Practice is intended to fix impressions upon nerve centres, and the briefer the interval between repetitions of a single impression, and the more highly individualized it is, the quicker the result will be obtained, the longer it will be retained, and the less nerve force will be wasted upon extraneous actions and impressions. *The Technicon, properly used, specializes practice,* and it thus helps to protect from pianists' cramp by reducing waste of nerve force lessening the time required to accomplish any result, and improving the quality of the discipline of practice to the nerve cells. It is therefore AN ECONOMIZER OF NERVOUS ENERGY—a thing which cannot be said of dumb pianos or of most of the mechanical aids to finger development. *Nerve force is an expensive product of physiological activity, which it is well always to use economically.*

Dr. WALTER PYE,

an eminent Surgeon of London, England, in speaking before the Musical Association of Great Britain, upon "The Necessity of a Systematic and Scientific Development of the Muscles of the Hand and Arm for Pianoforte Players," said:

It is very curious to see the ideas which trouble us medical men, from a surgical point of view, cropping up again very plainly from a different standpoint, and yet all coming practically to the same tning. I was much interested in hearing what Mr. Prentice said about this question of muscular control in connection with muscular efficiency, because it has been to the surgeon a very old standing difficulty, indeed, to understand how it comes about that the more rapidly and the more mechanically perfectly (especially with regard to rapidity) muscular movements are performed, still, *pari passa* with that, there frequently goes on a steadily increasing inefficiency of their performance. We find it as a pathological fact in pianoforte players, and we get it in other analogous cases over and over again, that is to say, as soon as ever we find that the will and the intelligence are separated from the muscular performance, we get at first an increased absolutely mechanical efficiency, and then if it is persevered in we get a gradual inefficiency, which ends frequently in absolute loss of power; as for instance in writers' cramp, which is a well-known example. On investigation it is found that the contraction of these muscles, acting purely as they have got to do by long course of habit without the intervention and control of the will, instead of being done with the head, is done mechanically with the hand and wrist, and that this has exercised a degenerating action upon the muscles until they actually waste.

Herr Julius Woolff, originally a writing master in Germany, has had great success in the cure of writers' cramp, using the same principle as that upon which the development of the muscles by the Technicon depends. He shows that if by discipline of the will people would concentrate their attention on

the orderly and intelligent actions of the muscles, through certain regular organized movements, the cramp would disappear, and the muscles would regain that strength which they had lost. From the surgeon's point of view one finds over and over again examples of this truth. The Technicon has interested me very much, because it affords such a striking proof that if we are to use our muscles properly we must use them with our heads. The great point about it is that it is impossible to perform some of the exercises upon the instrument unless you are thinking what you are going to do. Mind wandering would absolutely prevent the whole thing being useful ; but that is practically prevented, because most of the exercises would be very difficult to do unless you were actually thinking about them all the time. From a physiological and surgical point of view the Technicon, I think, has a very strong position.

TESTIMONIALS.

THE

KING OF PIANISTS,

FRANZ LISZT,

in the presence of A. W. Gottschalg (the Court organist at Weimar, and personal friend of the Abbe Liszt) and other eminent musicians, highly praised the Technicon at his home in Weimar, and wrote as follows to the inventor:

WEIMAR, October 14th, 1885.

MR. J. BROTHERHOOD, New York.

Dear Sir: Unfortunately I am too old now to derive any benefit from your invention. I recommend, however, the "Technicon" to younger, energetic natures, of whom there will be no scarcity. Cordially yours, F. LISZT.

AMERICA'S

GREATEST PIANIST,

WM. H. SHERWOOD,

SAYS:

I fully concur in the truthful solutions of the problems which piano players will have to thank you and your modest invention for in a superlative degree, as soon as they are able to know its value.

If the present leaders of piano study should fail to grasp the subject sufficiently to make practical use of the same, I feel certain that the near future will bring up those who will supersede them, and live to throw their prejudices (and their methods as well) into a permanent grave.

It is the only practical invention calculated to enable players to overcome not only the defects of the muscular and nervous powers involved in piano playing, but also *to counteract the one-sided and harmful influence of attempting to study exclusively on the keyboard.*

The results gained by myself and pupils are not only highly satisfactory, but I find its advantages constantly increasing.

WM. H. SHERWOOD.

FROM DR. WM. MASON,

NEW YORK.

I regard the "Technicon" as very helpful to piano-forte players, if used with intelligent care, because it is so ingeniously contrived that it reaches separately and individually the various muscles used in playing, and undoubtedly tends to a rapid development of strength and elasticity.

WILLIAM MASON.

FROM DR. HUGO RIEMANN,

HAMBURG.

Author of the "Musik-Lexicon."

The Technicon is superior to any other apparatus of the kind that I have ever seen, and is to be most warmly recommended to piano-players.

HUGO RIEMANN.

FROM ALBERT R. PARSONS,

NEW YORK.

President, Music Teachers' National Association, 1889-90

MR. J. BROTHERHOOD, No. 6 West 14th Street, New York.

Dear Sir: To see in your Technicon only an ingenious, simple and complete gymnasium for strengthening and schooling the muscles of finger, wrist, and forearm, is to see but part of the truth. The Technicon is all of that, but more besides.

For some time past a part of every lesson in my music room has consisted of "Technicon Drill," and with the happiest results, mental and muscular.

The sudden acquisition of maps and globes, where geography had hitherto been taught only as a mental abstraction, could hardly revolutionize and facilitate work in that science, more than does the Technicon the study and *mastery* of the physiological side of piano-forte playing.

In the Technicon, science and art join hands; while in its object lessons in technic, the dreams of former devisors of hand-moulders, hand-guides, etc., are at last realized and surpassed.

Cordially yours,

ALBERT R. PARSONS.

MR. RIDLEY PRENTICE,

LONDON, ENGLAND,

Author of "The Musician," says:

MR. J. BROTHERHOOD, New York:

Dear Sir:—I had come to the conclusion for some years past, that I must give up all hope of playing solos in public again, as it is impossible for me to get the necessary practice owing to the amount of teaching which I have to do. Now, however, *thanks entirely to the Technicon*, I have been able (a few weeks ago) to give a pianoforte recital at the Guildhall School of Music, when I included in my programme a most exacting work—the Sonata in F minor by Brahms. *On that occasion I played with more freedom and more effect than ever before in my life, although for years I have done no technical work on the pianoforte.*

You are at liberty to make any use you like of this fact, *for my debt to the Technicon increases daily, and I only wish I could do more to make it known.* Yours truly,

RIDLEY PRENTICE,
Professor of Pianoforte,
Guildhall School of Music.

FROM DR. BENJ. C. BLODGETT,

Director of Music, Smith College, Northampton, Mass.

Please send me another Technicon, *which will make a dozen I have introduced into my practice rooms within two months.* I have no hesitation in recommending a half hour with the Technicon as a full equivalent for two hours of the most faithful practice of finger exercises upon the piano for development of every fundamental quality of touch. *It enters into the daily work of scores on scores of my students, and I would not be without it myself for ten times its cost.* BENJ. C. BLODGETT.

IN REGARD TO THE "STUDENT'S TECHNICON," DR. BLODGETT WRITES:—Student's Technicon received: It is admirable. Send me six more soon as possible.

BENJ. C. BLODGETT,
Director of Music, Smith College,
Northampton, Mass.

FROM THE DIRECTOR OF MUSIC,

MISS PORTER'S AND MRS. DOW'S SCHOOL,

FARMINGTON, CONN.

We have been using the Brotherhood Technicon at the school for more than a year past, and it is now my intention to adopt it permanently for all the piano students of my department.

For this purpose we must increase the number of Technicons (of which we now have four) so as to enable us to give daily Technicon exercise to each pupil. Please, therefore, **send us, as soon as possible, six more of your valuable instruments.** In my own practice, I have found your invention of the greatest service, and take pleasure in recommending it both to teachers and pupils, as an indispensable aid to those who aspire to overcome the technical difficulties of modern pianoforte music, as it **produces results which key-board exercise is incapable of giving.**

BERNARD BOEKELMAN,
Musical Director.

FROM MR. W. S. B. MATHEWS,

CHICAGO, ILL.

For some time past I have been experimenting with the Technicon, both upon my own hands and upon those of my pupils. The results have not only justified all the claims you make for it, but have also led me to the question whether this is not the road to a new departure in piano teaching, for I am clearly of the conviction that you have rendered the piano-playing public a very great benefit by your invention.

It is not too much to say that the average pupil *loses* two-thirds of the time spent in practice, for he has to train his hands, get his musical conception, and unite it to the muscular apparatus all at once. Owing to the want of proper analysis, he commonly does all three of these things badly, the attention being directed to one point while he is missing it at another. I find that the muscular part of this proceeding can be done upon the Technicon *better than at the piano*, as fifteen minutes' Technicon exercise will give results equal to at least an hour's practice at the piano, and with great economy of nerve.

For persons with weak hands, stiff hands, or for any who desire to abridge the labor of obtaining control over the hand, the Technicon will be a boon, as it is *a complete gymnasium of the hand* and all its dependents, so far as used in piano playing. *From my experience with the Technicon, I am inclined to think that it marks the beginning of a new epoch in the art of piano teaching.*

W. S. B. MATHEWS.

FROM THE COLLEGE OF MUSIC.

CINCINNATI.

I have used the "Technicon" with my pupils for some months past, and with the most astonishing results. I have never taught Technique with more pleasure, and never had pupils more interested in their dry "Technical Exercises" than now since using the Technicon with them. I am confident that the time is not far distant when every thinking teacher will use the "Technicon" for his pupils.

A. W. DOERNER,
Professor of Pianoforte, Cincinnati College of Music.

AT OBERLIN CONSERVATORY OF MUSIC, OBERLIN, OHIO.

F. B. RICE, DIRECTOR.

A dozen Technicons are in constant use.

FROM THE

DIRECTOR OF MUSIC, WELLS COLLEGE,

AURORA, N. Y.

After a fair trial of the "Technicon" in the Musical Department, Wells College, it gives me great pleasure to acknowledge the decided merits of your ingenious invention. It is certainly a great help to piano students, and has fully met the high recommendations of it.

H. JACOBSEN,
Music Director.

FROM DIRECTOR OF THE

PHILADELPHIA MUSICAL ACADEMY.

In the spring I made the following experiment with a young girl 12 years of age, who had never touched the piano. She practised for two months under my supervision, on the Technicon only, one half to a full hour every day. After two months I took her to one of my teachers in the Primary Department and asked her to examine this pupil and to tell me how she compared with children of her age, who had studied on the piano alone. After due trial she found that the fingers of this young girl were as far advanced as a child that had taken one year, and her wrist as that of a child who had taken two years lessons. I think that this might convince every one of the great utility of the Technicon in saving time and preserving nerves in practising uninteresting technical studies. I have examined many inventions for the development of technique and can say that yours is the best appliance for the development of the muscles used in piano playing that ever has been invented.

RICHARD ZECKWER.

FROM THE DIRECTOR OF THE

BONELLI CONSERVATORY OF MUSIC,

SAN FRANCISCO.

About three and a half years ago my attention was called to Brotherhood's Technicon, and I at once recognized the inestimable benefits to be derived from its daily use, and adopted it in my Music School. My pupils now accomplish in one year what formerly took them two or more. Had I been fortunate enough to have had this instrument while a music student in Germany, my health would not have broken down, and I would have been in the concert field to-day. Such is my opinion of the Technicon, as a saver of time, strength and nerve power. Thirty minutes Technicon drill is equivalent to two hours piano drill. What a relief to the nervous system! Having at one period of my life become a medical student, for the sole purpose of studying the anatomy of the hand and arm, in order to discover some means, if possible, of making the study of music less arduous and wearing, I am prepared to state, from a physiological as well as musical standpoint, that the Technicon will do what no amount of piano practice can, and that is, *equally develop all the muscles.* Piano practice alone exercises certain muscles to the almost exclusion of others, and is one-sided, so to speak, in its development. Not so the Technicon. I cannot speak too strongly in its favor. It is invaluable; it is an absolute necessity, and should go hand in hand with the piano. The two instruments ought to be purchased together, and doubtless will be when music is taught on a more scientific basis and in accordance with the laws of physiology.

E. S. Bonelli,
Director.

FROM THE PRESIDENT OF THE

NEW YORK STATE MUSIC TEACHERS' ASSOCIATION, 1889-90,

AND DIRECTOR OF MUSIC, CLAVERACK COLLEGE, CLAVERACK, N. Y.

The Technicon has proved its value in our conservatory, both pupils and teachers being enthusiastic in its use. We fully realize that it has opened a shorter and better way to a superior technique; in fact, the most important advancement of recent times, in aiding technique, comes from this invention, making it practical to give the performer a *conscious control* over each nerve and tendon called into use by the key-board, thereby securing a delicacy, power, flexibility and velocity of fingers and wrists never before attainable. Our experience here, from its use in our conservatory the past school year, in common with hundreds of other teachers, sustains the truth of the above strong statement.

CHAS. W. LANDON,
Director of Music.

Testimonials also received from the following eminent Pianists and Teachers :

S. B. Mills,
Dr. Louis Maas,
Teresa Carreño,
Fannie Bloomfield Ziesler,
Carl Faelten,
F. Boscovitz,
Constantin Sternberg,
Dr. F. Ziegfield,
J. C. Fillmore,
Frederick Archer,
W. Waugh Lauder,
Edward Fisher, Toronto, Can.
H. M. Field, do. do.
F. G. Gleason,
Helen Hopekirk,
Amy Fay,
Clarence Eddy,
Henry Carter,
W. S. B. Mathews,
Wm. H. Dana,
Alexander Lambert,
Florian Oborski,

And many others.

The best invention ever produced for piano players.

Teresa Carreño.

It marks a new epoch in the art of piano teaching.

W. S. B. Mathews.

A wonderful help in preparing the hand for technical difficulties.

S. B. Mills.

THE FOLLOWING ARE TAKEN FROM SOME OF THE LATEST TESTIMONIALS RECEIVED:

From MISS FANNIE HARTZ, *Chickering Hall, New York.*

I have used the Technicon for several months past, and consider it a most ingenious and time-saving invention.

Owing to my many professional engagements, I have but little time for piano practice; but I find that half an hour devoted daily to the Technicon preserves my technique wonderfully.

I am also persuaded that it is invaluable for the production of a good quality of touch and tone; and I have known it, in the case of a pupil of mine, to cure a long standing weakness of the wrist.

I use the Technicon, with much success in my teaching, and earnestly recommend it to all painstaking students. FANNIE HARTZ.

From MRS. C. S. P. CARY, *Rochester, N. Y.*

The Technicon arrived safely, and I take pleasure in explaining its advantages to my class, which consists mostly of teachers.

All exercise which developes the strength of hand and arm without stiffening the muscles, is useful to the pianist.

The Technicon is more valuable than ordinary exercise, by strengthening the most important muscles and demanding an intelligent concentration of mind upon every motion.

I prefer the larger instrument for teachers; but the Students' Technicon has the advantage of portability. CECILIA S. P. CARY.

From MRS. KATE MARVIN KEDZIE, *Lansing, Mich.*

Please send me two more Students' Technicons.

I use my Technicon daily, one half-hour, and find, after eight months' use, that my technique has improved *more than with two years'* work at the pianoforte alone.

Shall endeavor to introduce the Student's Technicon as far as possible among my pupils. KATE MARVIN KEDZIE.

From MR. WILL. E. WHITE, *Dallas, Texas.*

Please send me four more Student's Technicons. It is doing wonders for my pupils, and I have not a pupil out of a class of fifty-five who does not use it daily.

I consider one hour with the Technicon is worth five hours at the piano for technical development of the hand. For pianists, it is the greatest invention of the 19th century. WILL. E. WHITE.

One talented pupil has been faithful in her practice on your invention and it is surprising to note the change in her touch and control of the hand. I inclose 25 cents in stamps, for your work on "The Anatomy of the Hand." MOLLIE A. HOWE.

From MR. JOHN W. METCALF, *Director of Music, Garfield University, Wichita, Kansas:*

Since 1885, about the time of the introduction of the Technicon, I have watched with pleasure the effects of its work, and while generally I am not a great friend to mechanical appliances as they exist, permit me, however, to give my unqualified endorsement to your most valuable invention.

It operates upon and brings under its influence muscles of the hand, wrist and arm, which do not get the required amount of exercise necessary to their complete development by piano practice alone. In many cases five minutes work at the Technicon will do more towards explaining to the pupil the clinging or portamento touch than as many months earnest work at the keyboard will accomplish; but, of course, it must be used with understanding and intelligence.

Our pupils delight in the practice it affords. We have several Technicons in use at the school and shall soon require several more of the Teachers' Technicons. With earnest wishes for the success you so richly deserve.

JOHN W. METCALF.

From MR. PHILIP WALTER, *Canton, Ohio.*

Where is the teacher that has not in his or her experience had pupils say: "I have practiced so hard this week, but I do not seem to have made any improvement." And why? Simply because they did not practice rightly.

Teach pupils to practice right: but how?

You can tell them to hold the hand so and so, strike so and so, practice slowly, etc., but there is something you cannot express to them in words for them to understand. You may talk and talk, about a sensitive touch, singing quality, etc., and they will wonder what you mean.

Get them a Technicon and you will soon be able to teach them to feel that which you cannot teach them by words, viz: Sensitive touch; *for it gives a consciousness of the muscles and especially the weak extensors.*

I never knew how weak the extensor muscles were before using the Technicon, and now I am convinced that it is the weakness of these muscles that causes most of the trouble in piano playing. With the strengthening of the extensors (followed by the proper exercises) one gains flexibility, independence and sensitiveness. How slow is the process on the piano alone, which works

contrary to the principles iuvolved for properly strengthening the extensor muscles.

But people say, "We had artists before the Technicon was in use." Yes, but how did they work—6, 8 and 10 hours daily. Has every pupil nerves enough to stand such an ordeal? Besides, why take so many years, when you can do it some other way in less time?

Is the time not fast approaching when the teacher will be demanded to be able to also play what he teaches? And why not? Who would not rather engage a teacher and player combined, in preference to a teacher that cannot play what he teaches? I hope the time is not far distant when the teacher can demand their pupils to get a Technicon, for the Student's Technicon is within the reach of all, and the teacher who loses sight of the advancement it represents, will be left so far behind he will never be able to make connections. PHILIP WALTER.

From MR. FRANK GEBEST, *Zanesville, Ohio.*

I have used the Technicon daily for ten months and feel that I have derived inestimable advantage from it, my fingers and wrists having gained greatly in strength and endurance. My "singing tone" is also greatly improved, and *I find that my muscles are more fully under the control of my mind*, which of course conduces to a more sympathetic, intelligent, and confident performance. I feel perfectly safe from mechanical embarrassments while I have a Technicon to practice on, and my strength *never* gives out now, though before it often failed me. I have given my pupils the privilege of practicing on my Technicon, but hope before long most of them will purchase for themselves. FRANK GEBEST.

From MR. JULIUS THEINHARDT, *Manchester, England.*

My Technicon was a constant companion during my five weeks, sojourn in Germany, and my two weeks' stay in Wales, aud I do not hesitate in saying, that though I had only one week's piano practice, yet the Technicon (I feel it) has done me much more good than the key-board.

J. THEINHARDT.

From MR. D. D. BRYANT, *Fort Scott, Kansas.*

If people only understood how the Technicon can place a talented pupil right within the pale of actual artistic accomplishment, and give the definite possibility of a more immediate success, they would even forego a little of instruction and put it into a Technicon. Why, one can just "see himself grow" in technical ability by the daily and systematic use of the Technicon. It is an indisputable fact that one can save in technical

studies in one year almost the price of a Technicon. Besides which *it produces an even, beautiful, velvety touch, as opposed to the hard, stiff, unwieldly tone made by exclusive piano practice.*

D. D. BRYANT.

From MISS EMMA LORE, *Wilmington, Del.*

It is simply miraculous what the Technicon has done for me. Many pieces which I had despaired of learning for some years to come, are now easily mastered.

I never play for anyone without the question being asked, "What exercises do you use?"

Although we have been in our country home all the summer, yet I have done no technical work on the piano, on account of guests in the house, yet the daily use of the Technicon has permitted me to learn several of Chopin's greater works during the past few weeks, as also the Mozart Concerto in D minor.

EMMA LORE.

From PROF. JOHN R. GRAY, *Dean Illinois College of Music, Wesleyan University, Bloomington, Ill.*

I have been using the Technicon for over two years, and find it a great labor-saving machine. I could not have kept my technique up so well in any other way with the amount of teaching I have to do.

JOHN R. GRAY.

From MR. P. H. WILLIAMS, *Bay City, Mich.*

I never knew what it was to have a very sensitive touch until I had used your Technicon.

Some of America's most eminent pianists and teachers have been my instructors in technique, but never have taught me what the Technicon has in a very short time.

Those subtle features in regard to touch, which are not teachable, are felt or experienced after a short trial with your invention.

P. H. WILLIAMS.

From MR. FLORIAN OBORSKI, *Professor of Piano at the New York College of Music.*

I consider the Technicon of great value, *especially the exercises it gives for the extensor muscles. The advantages gained in thus developing these muscles can only be fully appreciated by practical experience.*

FLORIAN OBORSKI.

From THE DIRECTOR OF MUSIC, *University of Kansas.*

A Brotherhood Technicon is in constant use in the Department of Music of the University of Kansas, and I regard it of great value to piano students. WILLIAM MAC DONALD.

From "HOLY CROSS ACADEMY," *Washington, D. C.*

We note with pleasure the benefit derived by our pupils from the daily use of the Technicon, and we warmly recommend it to all teachers.

SISTERS OF THE HOLY CROSS.

From MRS. MARION WARREN, *Rochester, N. Y.*

I felt that before the Technicon had been in my room six weeks, I would not take a thousand dollars for it, if I could not replace it.

MARION WARREN.

From MR. PETER N. BURKE, *Richmond Hill, N. Y.*

I fully concur in all that you say in regard to *the importance of developing the extensor muscles*, as the little practice which I have already had upon the Technicon, has enabled me to execute *pianissimo* passages with a degree of delicacy and finish, far beyond anything which I have hitherto accomplished, and I have no hesitation *in ascribing these results to the control of the extensor muscles, which the Technicon has given me.* I have also noticed an improvement in *trill* and *octave playing*, my speed in the latter having been increased about 20 per cent, as measured by the metronome.

PETER N. BURKE.

LIST OF SOME OF THE

SCHOOLS, ACADEMIES, COLLEGES, ETC.,

WHERE THE TECHNICON IS USED:

Miss Porter's and Mrs. Dow's School.....Farmington, Conn.
Miss E. E. Dana's School.....Morristown, N. J.
Metropolitan Conservatory of Music.....New York
Wells College.....Aurora, N. Y.
Academy of Notre Dame.....Berkeley St., Boston, Mass.
Loretto Abbey Academy.....Toronto, Canada
Smith College.....Northampton, Mass.
Claverack College.....Claverack, N. Y.
Dana's Musical Institute.....Warren, Ohio

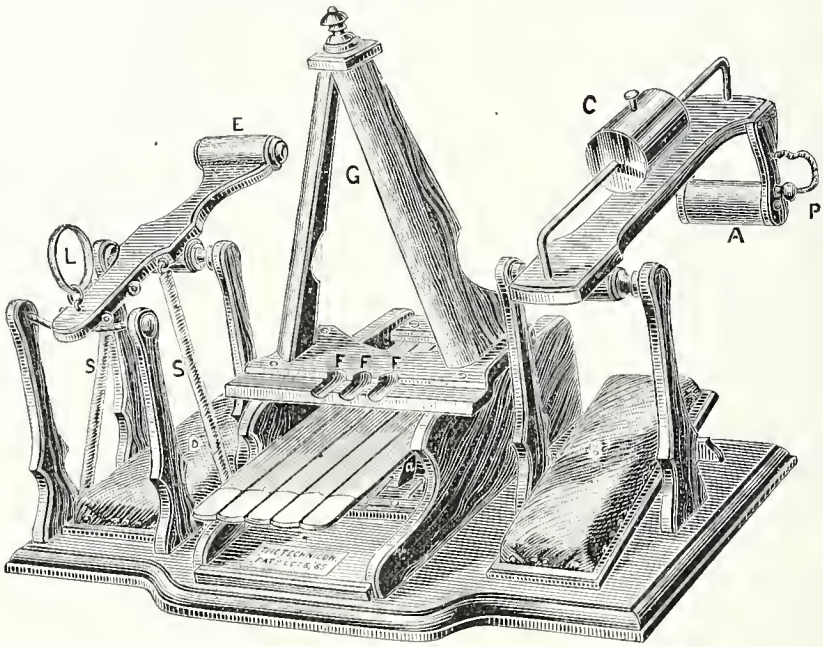
Philadelphia Musical Academy.....Philadelphia
College of Music.....Cincinnati, O.
Beaver Musical Institute.....Beaver, Pa.
Westminster College..... New Wilmington, Pa.
Brooklyn Conservatory of Music.....Brooklyn, N. Y.
Judson Institute.....Marion, Ala.
Oberlin Conservatory of Music..... Oberlin, O.
New England Conservatory of Music.....Boston, Mass.
Milwaukee School of Music.....Milwaukee, Wis.
Sugar Grove Seminary.....Sugar Grove, Pa.
Academy of the Visitation.....Georgetown, D. C.
Sacred Heart Academy.....Torrisdale, Pa.
School of Musical Art.....Fort Scott, Kan.
Peddie Institute.....Hightstown, N. J.
St. Mary's Academy.....Notre Dame, Ind.
Notre Dame Academy.....Rittenhouse Square, Philadelphia, Pa.
Detroit Conservatory of Music.....Detroit, Mich.
Hillsdale College.....Hillsdale, Mich.
College of Music.....Kansas City, Mo.
University of Kansas.....Lawrence, Kan.
Chaddock College.....Quincy, Ills.
Holy Cross Academy..... Washington, D. C.
Sacred Heart Academy.....Providence, R. I.
Academy of Notre Dame.....Roxbury, Mass.
South Jersey Institute.....Bridgeton, N. J.
Syracuse University.....Syracuse, N. Y.
Hellmuth College.....London, Canada
Toronto Conservatory of Music.....Toronto, Canada
Coe College.....Cedar Rapids, Ia.
University of the Pacific.....San José, Cal.
Institute for the Blind..... Austin, Texas
Academy of Notre Dame.....Holyoke, Mass.
Sacred Heart Academy.....Lancaster, Pa.
Ursuline Academy.....Dallas, Texas
Institute for the Blind.....Raleigh, N. C.
Wilson Female College.....Chambersburg, Pa.
Broad Street Conservatory of Music.....Philadelphia
Lassell Seminary.....Auburndale, Mass.
College of Music.....Toronto, Canada
Cornell University.....Ithaca, N. Y.
Miss Crawford's School.....Brooklyn, N. Y.
Incarnate Word Academy.....Houston, Texas
Sunny South Female Seminary.....Atlanta, Ga.
State Normal School.....Clarion, Pa.
Bishopthorpe School.....Bethleham, Pa.

Schultze's Conservatory of Music.....Lexington, Ky.
St. Ann's Academy.....Osage Mission, Kan.
Bayler University.....Waco, Tex.
Academy of Notre Dame.....Worcester, Mass.
Conservatory of Music.....Ypsilanti, Mich.
Clinton College.....Clinton, Ky.
Methodist Seminary.....Montpelier, Vt.
Summerville School.....Summerville, N. J.
Academy of Notre Dame.....Washington, D. C.
Hiram College.....Hiram, O.
Danbury School of Music.....Danbury, Conn.
Miss Haines' School.....Hartford, Conn.
Logan College.....Russellville, Ky.
W. C. Academy.....Dover, Del.
De Pauw University.....Greencastle, Ind.
Mansfield Female College.....Mansfield, La.
West Maryland College.....Westminster, Md.
Academy of Notre Dame.....East Boston, Mass.
Institute for the Blind.....Philadelphia, Pa.
Keystone Academy.....Factoryville, Pa.
Notre Dame Academy.....Lowell, Mass.
Institute for the Blind.....Brantford, Canada.
Theil College.....Greenville, Pa.
Greensboro Female College.....Greensboro, N. C.
Lake Erie Seminary.....Painesville, O.
Cleveland Conservatory of Music.....Cleveland, O.
Hamilton College.....Lexington, Ky.
Genesee Wesleyan Seminary.....Lima, N. Y.
Ontario Ladies' College.....Whitby, Ont.
Wesleyan University.....Bloomington, Ill.
Northfield Seminary.....Northfield, Mass.
Hamilton Music School.....Hamilton, Canada.
Cooper Limestone Institute.....Gaffney, S. C.
Barkeyville Academy.....Barkeyville, Pa.
Caldwell College.....Danville, Ky.
Blue Mountain Female College.....Blue Mountain, Miss.
Dr. Gardner's School.....New York, N. Y.
Normal College for the Blind.....Norwood, England.
Shorter Female College.....Rome, Ga.
Mills College.....San Francisco, Cal.
Academy of the Holy Rosary.....Woodland, Cal.
Sisters of Charity, Immaculate Conception Academy.....Davenport, Ia.
Sisters of Charity, St. Joseph's Academy.....Sprague, Wash.
Illinois College of Music, Wesleyan University.....Bloomington, Ill.
Chicago Conservatory of Music, Auditorium.....Chicago, Ill.

Used by Joseffy, Wm. H. Sherwood, Albert R. Parsons and many others amongst the leading Pianists and Teachers of America.

THE "TEACHER'S TECHNICON."

A COMPLETE HAND GYMNASIUM.



PRICES:

Black Walnut, Nickeled Mountings, - - *$22.50*
Mahogany, Nickeled Mountings, - - *$27.00*

Special Discount to Schools, Conservatories of Music, &c.

WEIGHT, SECURELY BOXED FOR SHIPPING, 35 LBS.

EXPLICIT DIRECTIONS SENT WITH EACH INSTRUMENT.

CORRESPONDENCE WITH TEACHERS SOLICITED.

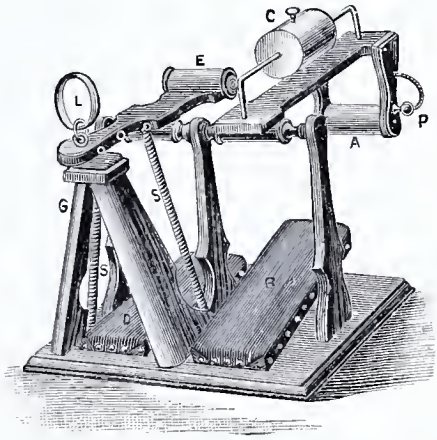
For further particulars apply to

J. BROTHERHOOD,
No. 6 West 14th St., New York.

Reduce the old-time drudgery with your pupils, and lighten their labor in acquiring technique.

THE "STUDENT'S TECHNICON."

FOR PUPILS' HOME USE.



PRICE, - - $12.00.

Weight, securely boxed for shipping, only 15 lbs.

The merits of the TECHNICON (as an instrument for carrying out a thoroughly scientific system of hand training and development) having become well established and recognized by leading piano teachers of Europe and America, I am desirous of extending its use amongst piano pupils generally. Many teachers who have experienced the good results to be obtained by Technicon exercise, and who are desirous that all their pupils should use it, have strongly recommended me to bring out a modified Technicon at a price that would enable teachers and pupils of moderate means to obtain it.

I therefore call attention to my new style of hand gymnasium, called the "STUDENT'S TECHNICON," which I place before the piano-playing public at the lowest possible price, with a view of having it universally used by piano teachers with their pupils, and also that pupils can have the advantage of possessing their own Technicons for daily home use.

Explicit instructions are sent with each Technicon.

For further particulars apply to

J. BROTHERHOOD,
No. 6 West 14th St., New York.

Agent for Germany, FRITZ SHUBERTH, Brüderstrasse 63, Leipsic.
" *England, AUGENER & CO., 86 Newgate Street, London, E. C.*
" *France, X. GREVENBIEHL, 29 Rue des Petits-Ecuries, Paris.*

N. B.—SEE CAUTION ON NEXT PAGE.

CAUTION.

Beware of cheap appliances, devoid of scientific principles, and, therefore, incapable of giving proper results.

ANATOMY OF THE HAND.

With a view of making the anatomy of the hand and arm intelligible to pianists, I have recently published a work upon the subject, showing by specially prepared diagrams (with explanatory notes), *the muscles used in piano playing*, and showing for which particular movements at the piano they are brought into action. It is a valuable aid to teachers for explaining which muscles should be used for producing the movements involved at the keyboard.

PRICE, - - -	50 cents.
TO TEACHERS, -	25 "

Send stamps.

J. BROTHERHOOD,
No. 6 West 14th St., New York.